AMENDMENTS TO THE CLAIMS

1. (previously presented) A medical composition comprising

a matrix-forming component comprising alkyl cyanoacrylate monomers, a stabilizer, and a plasticizer;

a solid aggregate material comprising a radiopacifier; and

a polymeric non-cyanoacrylate rheology modifying agent that has an average molecular weight greater than 200,000.

2. (canceled)

3. (previously presented) The composition of claim 1, the solid aggregate material further comprising a second non-cyanoacrylate rheology modifying agent comprising an inorganic particulate material.

4. (original) The composition of claim 1, wherein the non-cyanoacrylate rheology modifying agent is a polymer or copolymer compound soluble in the alkyl cyanoacrylate monomers or in the plasticizer.

5. (previously presented) The composition of claim 1, wherein the non-cyanoacrylate rheology modifying agent is a polymeric compound selected from the group consisting of poly(acrylates), poly(alkenes), poly(alkyl oxides), poly(amides), poly(carbonates), cellulosic polymers and copolymers, poly(dienes), poly(esters), poly(methacrylates), poly(saccharides), poly(siloxanes), poly(styrenes), poly(urethanes), poly(vinyl ethers), poly(vinyl esters), iodinated polymers and copolymers, and mixtures thereof.

6-8. (canceled)

9. (original) The composition of claim 1, wherein the non-cyanoacrylate rheology modifying agent and the plasticizer is the same material.

10. (previously presented) The composition of claim 1, wherein the non-cyanoacrylate rheology modifying agent is a polymer comprising from greater than 0% to about 10%, by weight of the matrix-forming components.

11. (original) The composition of claim 1, wherein the non-cyanoacrylate rheology modifying agent is a polymer comprising about 1% to about 5%, by weight of the matrix-forming components.

12-14. (canceled)

15. (original) The composition of claim 1, wherein the alkyl cyanoacrylate monomer is a compound of the formula $H_2C=C(CN)-C(O)OR$, wherein R is an alkyl group of about 1 to about 18 carbons.

16. (previously presented) The composition of claim 15, wherein the group represented by R is an alkyl group of about 4 to about 10 carbons.

17. (original) The composition of claim 1, wherein the alkyl cyanoacrylate monomer is present in an amount of from about 20% to about 75%, by weight of the matrix-forming component.

18. (original) The composition of claim 1, wherein the alkyl cyanoacrylate monomer is present in an amount of from about 30% to about 70%, by weight of the matrix-forming component.

19. (original) The composition of claim 1, wherein the stabilizer is an inorganic acid, an organic acid, a free radical inhibitor, an antioxidant, or a mixture thereof.

20. (original) The composition of claim 1, wherein the stabilizer is present in an amount of from about 50 ppm to about 500 ppm.

21. (previously presented) The composition of claim 1, wherein the radiopacifier is selected from the group consisting of Ta, TaO, Au, Pt, Zr, ZrO, bismuth subcarbonate, and barium sulfate.

22. (previously presented) The composition of claim 1, wherein the radiopacifier comprises radio-opaque particles with surface-modifying molecules adsorbed to or bonded to the surfaces of said particles for improving the stability of a suspension of said particles within said composition.

23. (previously presented) The composition of claim 1, wherein the radiopacifier is about 25% to about 100%, by volume of the solid-aggregate material.

24. (previously presented) The composition of claim 1, wherein the radiopacifier is about 60% to about 100%, by volume of the solid-aggregate material.

25. (original) The composition of claim 1, wherein the plasticizer is selected from the group consisting of organic esters containing 10 or more carbon atoms and polymeric compounds having a glass transition temperature less than 20°C.

26. (original) The composition of claim 1, wherein the plasticizer is selected from the group consisting of aromatic esters, alkyl esters, phthalate esters, citrate esters, glycerol esters, plant derived oils, animal derived oils, silicone oils, iodinated oils, vitamins A, C, E, and acetates and esters thereof, and mixtures thereof.

27. (original) The composition of claim 1, wherein the plasticizer is about 10% to about 75%, by weight of the matrix-forming component.

28. (original) The composition of claim 1, wherein the plasticizer is about 30% to about 60%, by weight of the matrix-forming component.

29. (withdrawn) A method of tissue bulking, filling, occluding or administering an embolic composition, comprising the steps of:

a) providing alkyl cyanoacrylate monomers, a stabilizer, a plasticizer, a polymeric non-cyanoacrylate rheology modifying agent having an average molecular weight greater than 200,000, and a solid aggregate material comprising a radiopacifier;

b) mixing each component provided in step a) to form an embolic composition; and

c) contacting the embolic composition with an ionic environment to render a solidified composition upon contact.

30. (withdrawn) The method of claim 29, wherein the embolic composition has an apparent viscosity of about 25 cP to about 2000 cP.

31. (withdrawn) The method of claim 29, wherein the embolic composition has an apparent viscosity of about 100 cP to about 300 cP.

32. (withdrawn) The method of claim 29, wherein the embolic composition demonstrates thixotropic, pseudo-plastic, or plastic behavior.

33. (withdrawn) The method of claim 29, wherein the solidified composition is hydrolytically stable.

34. (withdrawn) A method of embolizing a vascular space, comprising the steps of:

a) providing alkyl cyanoacrylate monomers, a stabilizer, a plasticizer, a polymeric non-cyanoacrylate rheology modifying agent having an average molecular weight of greater than 200,000, and a solid aggregate material comprising a radiopacifier;

b) mixing each component provided in step a) to form an embolic composition; and

c) administering the embolic composition into a vascular space in a patient in a manner that contacts the composition with the blood of the patient.

35. (withdrawn) The method of claim 34, wherein the vascular space is an arteriovenous malformation, an aneurysm, a fistula, or a tumor.

36. (withdrawn) The method of claim 34, wherein the step of administering the embolic composition stabilizes or mitigates rupture of an aneurysm.

37. (withdrawn) The method of claim 36, wherein the aneurysm is a brain aneurysm.

38. (previously presented) The composition of claim 3, wherein the inorganic particulate material is selected from the group consisting of fumed silica, silicatious earth, bentonite, and mixtures thereof.

39. (previously presented) The composition of claim 3, wherein the second non-cyanoacrylate rheology modifying agent is a particulate material comprising from greater than 0% to about 75%, by volume of the solid-aggregate materials.

40. (previously presented) The composition of claim 3, wherein the second non-cyanoacrylate rheology modifying agent is a particulate material comprising from greater than 0% to about 40%, by volume of the solid-aggregate materials.

41. (previously presented) The composition of claim 3, wherein the second non-cyanoacrylate rheology modifying agent comprises inorganic particles with surface-modifying molecules adsorbed to or bonded to the surfaces of said particles for improving the stability of a suspension of said particles within said composition.